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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,005	07/12/2005	Junya Kaku	050445	8929
23850 7590 11/26/2007 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005			EXAMINER LIANG, VEI CHUNG	
			ART UNIT 2169	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/542,005

Applicant(s)

KAKU, JUNYA

Examiner

Vei-Chung Liang

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12 July 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

This is in response to application filed on July 12, 2005 in which claims 1 - 17 are presented for examination.

### ***Status of Claims***

The examiner is examining the attached replacement sheets containing preliminary amendment of claims and drawings. Claims 1 – 17 are pending, of which claims 1, and 8 are in independent form. Claims 4 - 7 and 11 - 12 have been currently amended and 13 – 17 have been added by the applicant.

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 2003-011857 and 2003-011858, filed on January 21, 2003 in Japan.

### ***Information Disclosure Statement***

1. The information disclosure statement filed July 12, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

(a) The specification recites a menu key **46** (page 11, line 22); however, the details that the reference number **46** referring to was labeled as shutter key in Figure 1. A menu key is different from a shutter key. The reference number should maintain consistency and refer to the same feature using the same label through out the entire disclosure.

(b) The specification recites "upon completion of the process of step S25, the process goes to a step S47" (page 28, line 7). However, step S25 in Fig. 20 points to node 1 which leads to step S27 in Fig. 21. Step S27 is different from Step S47. According to the Figures, it is not possible for process of step 25 to lead to Step 27.

Appropriate correction is required.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities:

**As per Claim 1**, Claim 1 recites "...said noticed second management tale..." should be "...said noticed second management table...".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1 – 6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**As per Claim 1**, Claim 1 is directed to a data structure of menu display control data. A data structure not claimed as embodied in computer-readable media are descriptive material per se and is not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

The dependent claims, claims 2 – 6, included in the statement of reject but not specifically addressed in the body of the rejection have inherited the deficiencies of their parent claim and have not resolved the deficiencies. Therefore, they are rejected based on the same rationale as applied to their parent claim above.

2. Claims 7, 13 - 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**As per Claim 7**, claim 7 is directed to a data file storing menu display control data. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

The claims 13 – 17, included in the statement of reject but not specifically addressed in the body of the rejection have the same deficiencies of claim 7 and have not resolved the deficiencies. Therefore, they are rejected based on the same rationale as applied to claim 7 above.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 4, 6 – 15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi et al. US 6,795,097 B1 (hereinafter referred as Yamaguchi).

**As per Claim 1**, Yamaguchi discloses “a data structure of menu display control data which is read out by a processor of a display device displaying a menu image” as a list data supplied for the job dial compatible application for displaying menu (Yamaguchi, column 22, lines 43 - 46).

Yamaguchi discloses “a plurality of first management tables each of which manages a plurality of large items to be subjected to a display process by said processor” as a list menu item data D100 managing individual menu item corresponding

to various modes and functions displayed in the item display area (Yamaguchi, column 17, lines 51 - 54).

Yamaguchi discloses "a plurality of second management tables which belong to each of said plurality of first management tables" as a list data D101 corresponding to menu item at a lower level than list data D100 (Yamaguchi, column 18, lines 55 - 58).

Yamaguchi discloses "and each of which manages a plurality of small items to be subjected to a display process by said processor" as based on list data D101, a plurality of menu items are displayed corresponding to menu item (Yamaguchi, Column 18, lines 64 - 67).

Yamaguchi discloses "wherein dependency relationship information indicative of dependence on a small item managed under a first management table different from the first management table to which a noticed second management table belongs is assigned to said noticed second management table" as a duplication status flag indicates two kinds of menu items exist or not (Yamaguchi, column 17, lines 46 - 50). Thus, return, still, long video, and video mail sub menu items are assigned to both simple menu and capture mode in the detailed menu (Yamaguchi, column 20, lines 18 - 27; Fig. 35).

Yamaguchi discloses "so that, when a desired small item is selected, said processor can display a plurality of small items dependent on said desired small item, based on said dependency relationship information" as when shift key is pressed, [detailed menu] and [simple menu] sub menus are displayed for further selection of menu items (Yamaguchi, column 20, lines 24 - 27).



**As per Claim 2, and also applied to Claim 1,** Yamaguchi discloses "wherein desired small item information indicative of said desired small item is assigned to the first management table managing said desired small item, so that said processor can display said desired small item instead of a large item corresponding to said desired small item, based on said desired small item information" as the CPU rewrites the title of the title display area from [Smart Capture] to [Capture mode] when [Capture mode] menu item is selected from the [Smart Capture] menu list (Yamaguchi, column 18, lines 47 – 50; lines 61 – 62).

**As per Claim 3, and also applied to Claim 2,** Yamaguchi discloses "wherein said desired small item information is switched to small item unselected information when said desired small item is deselected, so that said processor can display the large item corresponding to said desired small item instead of said desired small item, based on said small item unselected information" as when menu item [return] is selected, the CPU 50 returns the job-dial window to the menu display corresponding to [Smart Capture] in Fig. 30 (Yamaguchi, column 19, lines 40 - 43).

**As per Claim 4, and also applied to Claim 1,** Yamaguchi discloses "wherein unselectable information is assigned to the first management table to which a second management table dependent on a small item of the second management table in which said desired small item is not selected belongs, so that said processor can

suspend display of the large items managed by the first management table to which said unselectable information is assigned” as a duplication status is assigned to [Smart Capture] menu data indicating if two kinds of menus are selectable or not (Yamaguchi, column 17, lines 46 -50 and Fig. 35).

**As per Claim 6, and also applied to Claim 1,** Yamaguchi discloses “wherein said dependency relationship information can be indicative of dependency relationships with a plurality of small items” as a duplication status flag indicates two kinds of menu items exist or not (Yamaguchi, column 17, lines 46 – 50). Thus, return, still, long video, and video mail sub menu items are assigned to both simple menu and capture mode in the detailed menu (Yamaguchi, column 20, lines 18 – 27; Fig. 35).

**As per Claim 7, and also applied to Claim 1,** Yamaguchi discloses “A data file storing menu display control data according to claim 1” as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).

**As per Claim 8,** Claim 8 is a system performing the methods disclosed in Claim 1. The limitations are substantially the same as Claim 1; therefore, the rejection of Claim 1 also applies to Claim 8.

**As per Claim 9**, Claim 9 is a system performing the methods disclosed in Claim 2. The limitations are substantially the same as Claim 2; therefore, the rejection of Claim 2 also applies to Claim 9.

**As per Claim 10**, Claim 10 is a system performing the methods disclosed in Claim 3. The limitations are substantially the same as Claim 3; therefore, the rejection of Claim 3 also applies to Claim 10.

**As per Claim 11**, Claim 11 is a system performing the methods disclosed in Claim 4. The limitations are substantially the same as Claim 4; therefore, the rejection of Claim 4 also applies to Claim 11.

**As per Claim 12, and also applied to Claim 8**, Yamaguchi discloses "a photographing means for photographing an object" as a camera unit 22 is included in the main unit (Yamaguchi, column 5, lines 1 – 11).

Yamaguchi also discloses "a creating means for creating an image file containing an image signal of the object photographed by said photographing means and menu information including said desired small item" as image data can be generated by the video capture processing chip and store in a hard drive (Yamaguchi, column 8, lines 36 - 41) and the main unit has a jog-dial for menu selection (Yamaguchi, column 16, lines 21 - 37).

**As per Claim 13, an also applied to Claim 2, Yamaguchi discloses “a data file storing menu display control data” as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).**

**As per Claim 14, an also applied to Claim 3, Yamaguchi discloses “a data file storing menu display control data” as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).**

**As per Claim 15, an also applied to Claim 4, Yamaguchi discloses “a data file storing menu display control data” as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).**

**As per Claim 17, an also applied to Claim 6, Yamaguchi discloses “a data file storing menu display control data” as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).**

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. US 6,795,097 B1 (hereinafter referred as Yamaguchi) in view of Hostettler US PGPub 2003/0192030 A1 (hereinafter referred as Hostettler).

**As per Claim 5, and also applied to Claim 1**, Yamaguchi discloses "wherein the plurality of second management tables belonging to each of said plurality of the first management tables form a sequence" as menu item data D100f includes data for items 1 to N sequentially (Yamaguchi, column 17, lines 51 - 52 and Figure 31B).

However, Yamaguchi does not disclose the limitation of "leading position information and number-of-tables information of said plurality of second management tables are assigned to each of said plurality of the first management tables".

On the other hand, Hostettler discloses such limitation as a menu structure that defines number of menus, position of the menus, and the number of menu items (Hostettler, paragraph 0015, lines 1 – 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Yamaguchi's invention to assign number of menu, position of menu to the menu data list in view of Hostettler. Doing so would provide advantages such as a means for effectively defining menu item structure for each menu.

**As per Claim 16, and also applied to Claim 5**, Yamaguchi discloses "a data file storing menu display control data" as a program storage medium used to install the jog-dial utility program (Yamaguchi, column 26, lines 4 – 14).

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Uchida US PGPub 2001/0026291 A1 discloses a menu display method. The information regarding a menu display method is relevant material.
  - b. Brunts et al. US 5,774,828 discloses a system for navigating sub menus in limited sized screen. The information regarding navigating sub menus is relevant material.
  - c. Moyer et al. US 2004/0075693 A1 discloses a system for displaying menus in a compact screen. The information regarding displaying menus in a compact screen is relevant material.
  - d. Bill N. Schilit, et al. "m-Links: An infrastructure for very small internet device", ACM SIGMOBILE July 2001, Rome Italy page 122-131, discloses navigating HTML files in a menu screen. The information regarding navigating HTML files in a menu screen is relevant material.
  - e. Kang US PGPub 2003/0150853 A1 discloses a system for menu selection. The information regarding menu selection is relevant material.
  - f. Tambata et al. US PGPub 2003/0048309 A1 discloses a system for menu display. The information regarding menu display is relevant material.
  - g. Matsumoto et al. US PGPub 2002/0047866 A1 discloses a system for menu display. The information regarding menu display is relevant material.

- h. Goldsmith US PGPub 2005/0076309 A1 discloses a hierarchical in-place menu. The information regarding a hierarchical in-place menu is relevant material.
- i. Harrison et al. US PGPub 2002/0116718 A1 discloses a system for sub menu switch. The information regarding sub menu switch is relevant material.
- j. Wilcox et al. US 6,678,891 B1 discloses a navigational user interface. The information regarding a navigational user interface is relevant material.
- k. Parulski et al. US 6,629,104 B1 discloses a system for categorizing digital images. The information regarding categorizing digital images is relevant material.
- l. Sudo US 5,856,827 discloses a system for hierarchy displays. The information regarding hierarchy displays is relevant material.
- m. Carlson et al. US 6,292,188 B1 discloses a system for navigating menus. The information regarding navigating menus is relevant material.
- n. Anderson US PGPub 2003/0112357 A1 discloses a system for sorting images. The information regarding sorting images is relevant material.
- o. Moon et al. US PGPub 2004/0095479 A1 discloses a system for sorting still pictures. The information regarding sorting still pictures is relevant material.
- p. Alagappan et al. US PGPub 2007/0061488 A1 discloses a system for flexible user interfaces. The information regarding flexible user interfaces is relevant material.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vei-Chung Liang whose telephone number is (571) 270-1984. The examiner can normally be reached on Mon.-Thursday, 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vei-Chung Liang  
V.C.L./vl   
November 8, 2007

  
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